b) a shaft connected to the partial enclosure on one end and to an actuator on an opposing end thereof and adapted to rotate the partial enclosure;

c) a permeable disc disposed in the partial enclosure;

d) a diffuser plate disposed in the partial enclosure and positioned below the permeable disc; and

e) a substrate carrier movably disposed above the permeable disc, the substrate carrier having a substrate mounting surface and a plurality of electrical contacts disposed about the perimeter of the substrate receiving surface.

2. The apparatus of claim 1, further comprising a second fluid inlet disposed above the permeable disc to deliver a fluid onto the permeable disc.

3. The apparatus of claim 1, wherein the first fluid inlet is disposed in a portion of the shaft fluidly connected with the partial enclosure.

4. The apparatus of claim 1, wherein the diffuser plate is made of a plastic.

5. The apparatus of claim 1, further comprising an anode disposed in the partial enclosure below the diffuser plate.

6. The apparatus of claim 1, wherein the permeable disc comprises polyurethane.

7. The apparatus of claim 1, wherein the diffuser plate is comprised of a material selected from the group of fluoropolymers, PE, HDPE, UHMW and combinations thereof.

8. The apparatus of claim 7, wherein the diffuser plate comprises a plurality of holes formed therein.

9. The apparatus of claim 1, wherein the permeable disc comprises a plurality of pores disposed therein for flow of material therethrough.

10. The apparatus of claim 1, wherein the permeable disk further comprises grooves.

11. The apparatus of claim 5, wherein the anode is a consumable comprising the same material as a conductive material to be deposited on a substrate surface.

12. The apparatus of claim 5, wherein the anode is in contact with the permeable disk.

13. The apparatus of claim 5, further comprising a membrane disposed between the anode and permeable disk.

14. The apparatus of claim 1, wherein apparatus provides orbital motion, circular rotation, translational motion, or linear motion between the wafer and the permeable disk.

15. A processing system for forming a planarized layer on a substrate, comprising:

a) a processing platform having two or more processing stations, a loading station and a substrate transfer device disposed above the processing stations and the loading station;

b) a processing apparatus positioned at each processing station, the processing apparatus comprising:

(i) a partial enclosure defining a processing region and having a fluid inlet and a fluid outlet;

(ii) a shaft connected to the partial enclosure on one end and to an actuator on an opposing end thereof and adapted to rotate the partial enclosure;

(iii) a permeable disc disposed in the partial enclosure;

(iv) a diffuser plate disposed in the partial enclosure and positioned below the permeable disc; and

(v) a substrate carrier movably disposed above the permeable disc, the substrate carrier having a substrate mounting surface and a plurality of

electrical contacts disposed about the perimeter of the substrate receiving surface.

16. The processing system of claim 15, further comprising a second fluid inlet disposed above the permeable disc to deliver a fluid onto the permeable disc.

17. The processing system of claim 15, wherein the first fluid inlet is disposed in a portion of the shaft fluidly connected with the partial enclosure.

18. The processing system of claim 15, wherein the diffuser plate is made of a plastic.

19. The processing system of claim 15, further comprising an anode disposed in the partial enclosure below the diffuser plate.

20. The processing system of claim 15, wherein the permeable disc comprises polyurethane.

21. The processing system of claim 15, wherein the diffuser plate is comprised of a material selected from the group of fluoropolymers, PE, HDPE, UHMW and combinations thereof.

22. The processing system of claim 15, wherein the permeable disc comprises a plurality of pores disposed therein for flow of material therethrough.

23. The processing system of claim 15, wherein the permeable disk further comprises grooves.

24. The processing system of claim 19, wherein the anode is a consumable comprising the same material as a conductive material to be deposited on a substrate surface.

25. The processing system of claim 19, wherein the anode is in contact with the permeable disk

26. The processing system of claim 15, wherein the apparatus provides orbital motion, circular rotation, translational motion, or linear motion between the wafer and the permeable disk.

27. The processing system of claim 15, further comprising a membrane disposed between the anode and permeable disk.

28. The processing system of claim 15, further comprising one or more additional processing stations capable of polishing conductive materials from the substrate surface.

29. The processing system of claim 15, further comprising one or more additional processing stations capable of polishing dielectric materials from the substrate surface.

30. A method of processing a substrate, comprising:

a) positioning the substrate in an electrolyte solution a first distance from a permeable disc disposed in the electrolyte;

b) applying a current to a surface of the substrate exposed to the electrolyte and depositing a material on the substrate;

c) positioning the substrate a second distance from the permeable disc, the second distance being less than the first distance; and

d) depositing the material on the substrate at the second distance.

31. The method of claim 30, wherein the electrolyte is a copper containing solution.

32. The method of claim 31, wherein less than 5000 angstroms of material is deposited at the first distance.

33. The method of claim 30, wherein the current is applied in a range from about 20 amps or less.

34. The method of claim 30, wherein the permeable disc is a polishing pad.

35. The method of claim 34, wherein applying the current to the substrate comprises the use of a pulse plating technique.

36. The method of claim 30, wherein the first distance is between about 1 mm and about 5 mm.

37. The method of claim 36, wherein the second distance is between about 100 μm or less.

38. The method of claim 36, wherein the substrate and the permeable disk are in contact when depositing the material on the substrate at the second distance.

39. The method of claim 30, further comprising transferring the substrate to a polishing apparatus.

40. The method of claim 39, wherein the substrate has a surface comprising a dielectric layer with feature definitions formed therein, a barrier layer conformally deposited on the dielectric layer and in the feature definitions formed therein, wherein the method deposits a copper containing material on the barrier layer.

41. The method of claim 40, further comprising:

e) removing residual copper containing materials;

f) removing the barrier layer; and

g) buffing the substrate surface to remove defects formed thereon.

42. The method of claim 38, wherein the permeable disk exerts a pressure on the substrate of about 2 psi or less at the second distance.

43. The method of claim 30, wherein the current is applied in a range between about 0.5 amps and about 5.0 amps.

44. The method of claim 43, wherein features of 1 micron or less are substantially filled at the first distance.

45. The method of claim 33, wherein features of 1 micron or more are substantially filled at the second distance.

46. A method of processing a substrate, comprising:

positioning the substrate in an electrolyte solution a first distance from a permeable disc disposed in the electrolyte; and

applying a current to a surface of the substrate exposed to the electrolyte and depositing a material on the substrate.

47. The method of claim 46, further comprising positioning the substrate a second distance from the permeable disc, the second distance being less than the first distance.

48. The method of claim 47, further comprising depositing the material on the substrate at the second distance.

49. The method of claim 46, wherein the electrolyte is a copper containing solution.

50. The method of claim 49, wherein less than 5000 angstroms of material is deposited at the first distance.

51. The method of claim 46, wherein the current is applied in a range from about 20 amps or less.

52. The method of claim 46, wherein the permeable disc is a polishing pad.

53. The method of claim 47, wherein applying the current to the substrate comprises the use of a pulse plating technique.

54. The method of claim 46, wherein the first distance is between about 1 mm and about 5 mm.

55. The method of claim 54, wherein the second distance is between about 100 μm or less.

56. The method of claim 54, wherein the substrate and the permeable disk are in contact when depositing the material on the substrate at the second distance.

57. The method of claim 46, further comprising transferring the substrate to a polishing apparatus.

58. The method of claim 57, wherein the substrate has a surface comprising a dielectric layer with feature definitions formed therein, a barrier layer conformally deposited on the dielectric layer and in the feature definitions formed therein, wherein the method deposits a copper containing material on the barrier layer.

59. The method of claim 58, further comprising:
removing residual copper containing materials;
removing the barrier layer; and
buffing the substrate surface to remove defects formed thereon.

60. The method of claim 55, wherein the permeable disk exerts a pressure on the substrate of about 2 psi or less at the second distance.

61. The method of claim 46, wherein the current is applied in a range between about 0.5 amps and about 5.0 amps.

62. The method of claim 61, wherein features of 1 micron or less are substantially filled at the first distance.

63. The method of claim 51, wherein features of 1 micron or more are substantially filled at the second distance.

64. A method of processing a substrate, comprising:

positioning the substrate in an electrolyte solution a first distance from a permeable disc disposed in the electrolyte and depositing a material on the substrate by an electroless deposition technique;

positioning the substrate a second distance from the permeable disc, the second distance being less than the first distance; and

depositing the material on the substrate at the second distance by an electroless deposition technique.

65. The method of claim 64, wherein the electrolyte is a copper containing solution.

66. The method of claim 65, wherein less than 5000 angstroms of material is deposited at the first distance.

67. The method of claim 64, wherein the permeable disc is a polishing pad.

68. The method of claim 64, wherein the first distance is between about 1 mm and about 5 mm.

69. The method of claim 68, wherein the second distance is between about 100 μm or less.

70. The method of claim 68, wherein the substrate and the permeable disk are in contact when depositing the material on the substrate at the second distance.

71. The method of claim 64, further comprising transferring the substrate to a polishing apparatus.

72. The method of claim 71, wherein the substrate has a surface comprising a dielectric layer with feature definitions formed therein, a barrier layer conformally deposited on the dielectric layer and in the feature definitions formed therein, wherein the method deposits a copper containing material on the barrier layer.

73. The method of claim 72, further comprising:
removing residual copper containing materials;
removing the barrier layer; and
buffing the substrate surface to remove defects formed thereon.

74. The method of claim 70, wherein the permeable disk exerts a pressure on the substrate of about 2 psi or less at the second distance.

75. The method of claim 64, wherein the polishing pad comprises a non-conductive material.

76. The method of claim 64, wherein features of 1 micron or less are substantially filled at the first distance.

77. The method of claim 64, wherein features of 1 micron or more are substantially filled at the second distance.

78. A method for processing a substrate surface, comprising:

providing a substrate comprising a dielectric layer with feature definitions formed therein, a barrier layer conformally deposited on the dielectric layer and in the feature definitions formed therein;

depositing a copper containing material on the barrier layer while planarizing the copper containing material formed thereon;

polishing the substrate surface on a first platen to remove residual copper containing materials;

polishing the substrate surface on a second platen to remove the barrier layer; and

buffing the substrate surface on a third platen to remove defects formed thereon.

79. The method of claim 78, further comprising transferring the substrate to a cleaning unit to further reduce any defects formed on the substrate surface.

80. The method of claim 78, wherein the first platen, second platen, and/or the third platen comprise a rotational, stationary or linear polishing pad.

81. The method of claim 78, wherein the first platen, second platen, and/or the third platen comprise a fixed abrasive polishing pad.

82. The method of claim 78, wherein the substrate has a surface comprising a dielectric layer with feature definitions formed therein, a barrier layer conformally deposited on the dielectric layer and in the feature definitions formed therein, wherein the method deposits a copper containing material on the barrier layer.

83. The method of claim 78, wherein depositing a copper containing material on the barrier layer while planarizing the copper containing material formed thereon comprises

a) positioning the substrate in an electrolyte solution a first distance from a permeable disc disposed in the electrolyte and depositing a material on the substrate; and

b) positioning the substrate a second distance from the permeable disc, the second distance being less than the first distance; and